



COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA PUBLIC UTILITY COMMISSION
P.O. BOX 3265, HARRISBURG, PA 17105-3265

IN REPLY PLEASE
REFER TO OUR FILE

August 11, 2016

A-2015-2512841

TO ALL PARTIES

Application of PENNDOT to alter the public at-grade crossing by the installation of new automatically operated flashing-light crossing warning signals with short arm gates where Slate Hill Road (SR 2025) (DOT 592 204 U) crosses at-grade the single track of Norfolk Southern Railway Company in Lower Allen Township, Cumberland County.

To Whom It May Concern:

In accordance with numbered Paragraph 3 of the Commission's Secretarial Letter dated February 18, 2016 in the above-captioned proceeding, Pennsylvania Department of Transportation (PennDOT) has submitted detailed situation and circuitry plans for the proposed crossing project for this Commission's approval.

A set of final situation and circuitry plans titled, "CAMP HILL, PA CFLGS AT SLATE HILL RD", consisting of twenty-three (23) sheets were received on June 29, 2016.

The parties have been served with a copy of the plans for review and none of the parties has advised this Commission that it objects to approval of the plan.

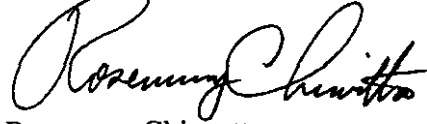
Please be advised that the plans have been certified as the correct plans and are hereby approved.

The Parties are reminded that failure to comply with this or any Order or Secretarial Letter in this proceeding may result in an enforcement action seeking civil penalties and/or other sanctions pursuant to 66 Pa. C.S. § 3301.

If you are dissatisfied with the resolution of this matter, you may, as set forth in 52 Pa. Code §§ 1.31 and 5.44, file a Petition for Reconsideration from Staff Action (Petition) with the Commission within twenty (20) days of the date of this letter. The Petition shall be sent to: Secretary, PA Public Utility Commission, P.O. Box 3265, Harrisburg, PA 17105-3265, and must be filed within twenty (20) days, or if no timely request is made, the action will be deemed to be a final action of the Commission.

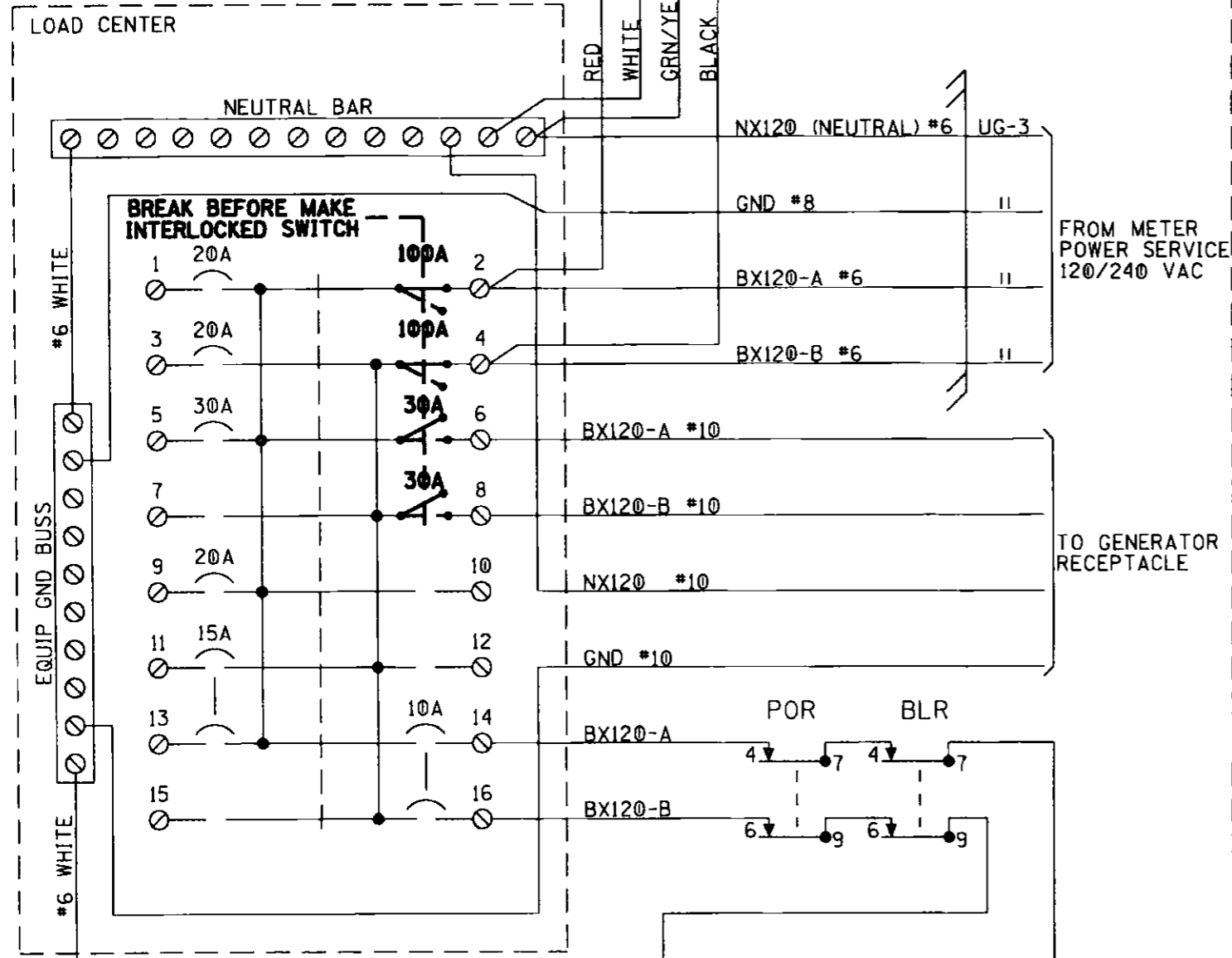
The Petition MUST include: (1) a written statement (divided into numbered paragraphs) outlining the reasons for the request; (2) the case docket number (it is provided for you at the top right hand corner of this letter); (3) the party on whose behalf the petition is made; (4) a Certificate of Service on the other parties of record; and (5) a Verification with original signature in accordance with 52 Pa. Code § 1.36.

Very truly yours,

A handwritten signature in cursive script, reading "Rosemary Chiavetta". The signature is written in black ink and is positioned above the printed name and title.

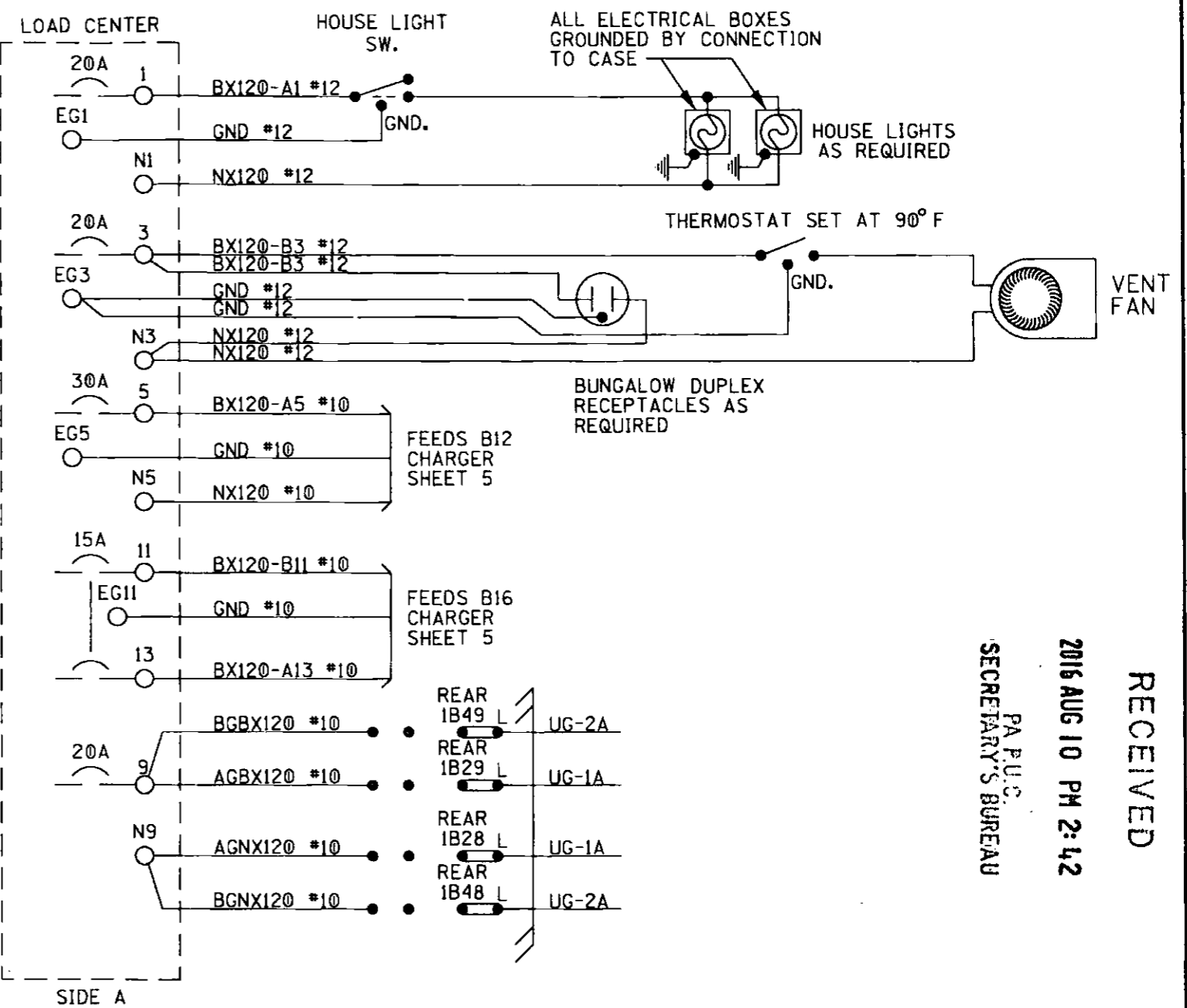
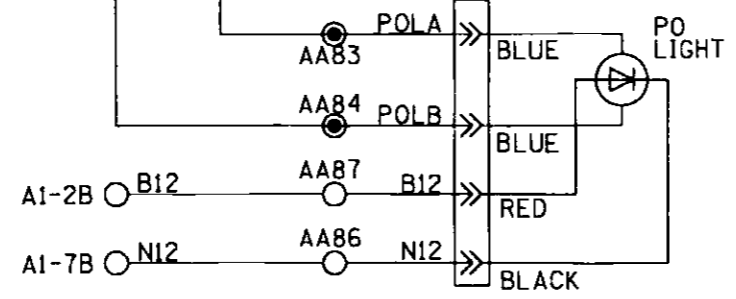
Rosemary Chiavetta
Secretary

ERICO
EPD120/240TDFL



NOTE: ALL AC WIRING IS TO BE IN METALLIC CONDUIT WITH NO EXPOSED TERMINALS. ALL AC 120V AND 240V EQUIPMENT IS TO BE PROPERLY GROUNDING.

- SQUARE 'D' PART NUMBERS:
 LOAD CENTER — Q0116L125G
 10A 1P CIR BKR — Q0110
 10A 2P CIR BKR — Q0210
 15A 2P CIR BKR — Q0215
 20A 1P CIR BKR — Q0120
 30A 1P CIR BKR — Q0130
 30A 2P CIR BKR — Q0230
 40A 2P CIR BKR — Q0240
 100A 2P CIR BKR — Q02100
 MECH INTERLOCK — PK4DTIM4LA



NOTE: ALL WIRING TO BE #16AWG UNLESS NOTED OTHERWISE.

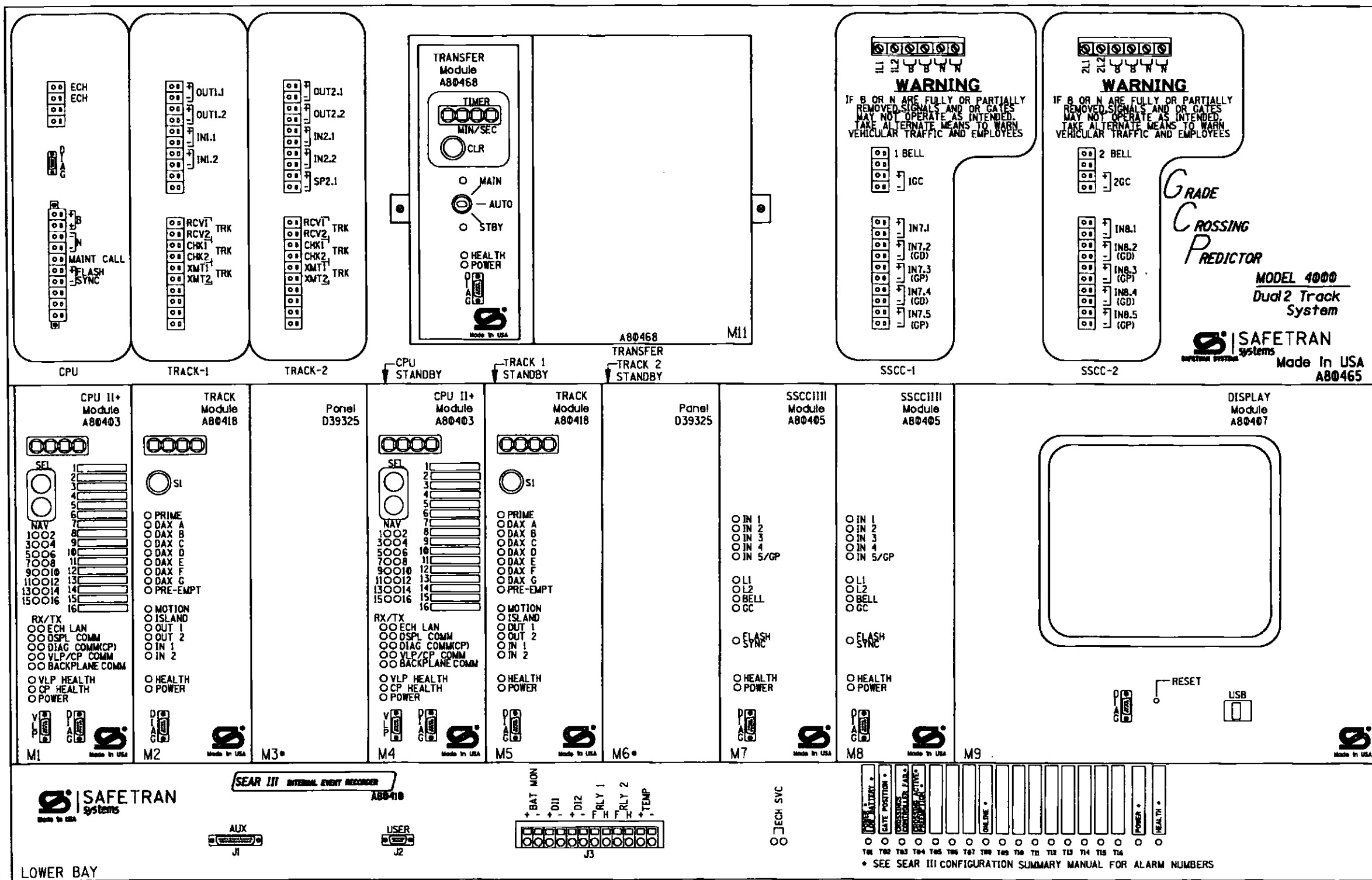
GENERATOR RECEPTACLE:
MALE CONNECTOR - NEMA L1430-F1

RECEIVED
 2016 AUG 10 PM 2:42
 PA P.U.C.
 SECRETARY'S BUREAU

REVISION																				
INITIALS																				

PROPERTY
PENNSYLVANIA R.R.

DESIGNED BY: WJK 04-05-16		NS NORFOLK SOUTHERN	
DRAWN BY: XRL 04-05-16		OFFICE OF ASS'T. VICE PRESIDENT COMM. & SIGNAL, ATLANTA, GA. M.P.: LG-5.24	
CHECKED BY: PEH 04-08-16		CAMP HILL, PA CFLGS AT SLATE HILL RD	
IN SERVICE: -		LURGAN BRANCH	
		CADD or DWG. No. 03330052.04	
		FILE No. R- SHEET No. 4 of 23	



WARNING
REMOVAL OF THE SSSCIII MODULE WILL CAUSE THE GATE(S) TO DROP BUT THE LIGHTS WILL NOT ACTIVATE

CAUTION
ASSURE CORRECT POLARITY OF THE SSSCIII MODULE OR SEVERE DAMAGE WILL OCCUR.

WARNING
IF B OR N ARE FULLY OR PARTIALLY REMOVED SIGNALS AND OR GATES MAY NOT OPERATE AS INTENDED. TAKE ALTERNATE MEANS TO WARN VEHICULAR TRAFFIC AND EMPLOYEES

WARNING
IF B OR N ARE FULLY OR PARTIALLY REMOVED SIGNALS AND OR GATES MAY NOT OPERATE AS INTENDED. TAKE ALTERNATE MEANS TO WARN VEHICULAR TRAFFIC AND EMPLOYEES

GRADE CROSSING PREDICTOR
MODEL 4000
Dual 2 Track System
SAFETRAN systems
Made in USA
A80465

ATTENTION!
ENSURE THE DISPLAY MODULE HEATER IS DISABLED. LEAVING THE DISPLAY HEATER ENABLED WILL REDUCE THE AMOUNT OF BATTERY STANDBY TIME IN THE EVENT OF AN AC POWER FAILURE.

HEATER FUNCTION IS JUMPER SELECTABLE ON THE DISPLAY MODULE BOARD. THREE OPTIONS ARE AVAILABLE:
NORMAL LCD HTR (DEFAULT)
HI CURRENT
NO JUMPER (HEATER DISABLED)

* = MAIN AND STANDBY MAY USE RIO IN TRACK 2 SLOTS (M3 AND M6)

4000 GCP 2-TK CHASSIS & MODULE LAYOUT

RECEIVED
2016 AUG 10 PM 2:42
PA P.U.S.
SECRETARY'S BUREAU

DESIGNED BY: WJK 04-05-16	NS NORFOLK SOUTHERN
DRAWN BY: XRL 04-05-16	
CHECKED BY: PEH 04-08-16	OFFICE OF ASS'T. VICE PRESIDENT COMM. & SIGNAL, ATLANTA, GA. M.P.: LG-5.24
IN SERVICE: - -	CAMP HILL, PA CFLGS AT SLATE HILL RD
	LURGAN BRANCH FILE No. R- CADD or DWG. No. 03330052.06 SHEET No. 6 of 23

REVISION INITIALS

PROPERTY PENNSYLVANIA R.R.

SSCC
 Gates Used = Yes
 SSCC1+2 GPs Coupled = Yes
 Min Activation = 0 sec
 Rmt Activation Cancel = 2 min
 Bell On Gate Rising = No
 Mute Bell On Gate Down = No
 SSCCIV Controller Used = No

SSCC: 1
 SSCC-1 Activation = AND 1 XR
 SSCC-1 Gate Delay = 6 sec
 SSCC-1 Number of GPs = 1
 SSCC-1 Number of GDs = 2
 SSCC 1: Flash Rate = 40
 SSCC 1: Low Battery Detection = No
 SSCC 1: Flash Sync = master
 SSCC 1: Invert Gate Output = No
 SSCC 1: Lamp Neutral Test = Off
 Aux-1 Xng Ctrl Used = No

SSCC: 2
 SSCC-2 Activation = AND 1 XR
 SSCC-2 Gate Delay = 6 sec
 SSCC-2 Number of GPs = 0
 SSCC-2 Number of GDs = 0
 SSCC 2: Flash Rate = 40
 SSCC 2: Low Battery Detection = No
 SSCC 2: Flash Sync = slave
 SSCC 2: Invert Gate Output = No
 SSCC 2: Lamp Neutral Test = Off
 Aux-2 Xng Ctrl Used = No

OUTPUT: assignment page 1
 OUT 1.1 = Not Used
 OUT 1.2 = Not Used

INPUT: assignment page 1
 IN 1.1 = Not Used
 IN 1.2 = Not Used

IO: assignment SSCC
 OUT GC 1 = Gate Output 1
 OUT GC 2 = Gate Output 2
 IN 7.1 = Not Used
 IN 7.2 = GD 1.2
 IN 7.3 = AND 1 XR Enable
 IN 7.4 = GD 1.1
 IN 7.5 = GP 1.1
 IN 8.1 = Out Of Service IP 1
 IN 8.2 = Not Used
 IN 8.3 = Not Used
 IN 8.4 = Not Used
 IN 8.5 = Not Used

SEAR
 SEAR Subnode = 3
 DI 1 = Not Used
 DI 2 = Not Used
 Rly 1 = General I
 Rly 2 = Not Used

SEAR: Inputs
 SP 2.1 = POK 1
 SP 3.1 = Not Used
 SP 4.1 = Not Used
 SP 5.1 = Not Used
 SP 6.1 = Not Used

SEAR: slot 1-4 inputs
 IN 1.1 = Not Used
 IN 1.2 = Not Used
 IN 2.1 = Not Used
 IN 2.2 = Not Used
 IN 3.1 = Not Used
 IN 3.2 = Not Used
 IN 4.1 = Not Used
 IN 4.2 = Not Used

SEAR: Inputs slot 5
 IN 5.1 = Not Used
 IN 5.2 = Not Used

SEAR: Inputs slot 6
 IN 6.1 = Not Used
 IN 6.2 = Not Used

SEAR: slot 7-8 inputs
 IN 7.1 = Not Used
 IN 8.2 = Not Used
 IN 8.3 = Not Used
 IN 8.4 = Not Used
 IN 8.5 = Not Used


SITE: programming
 Radio Subnode = 1
 Field Password = Off
 Low Battery Enabled = Off

Configuration Package File

Filename: 03330052.pac

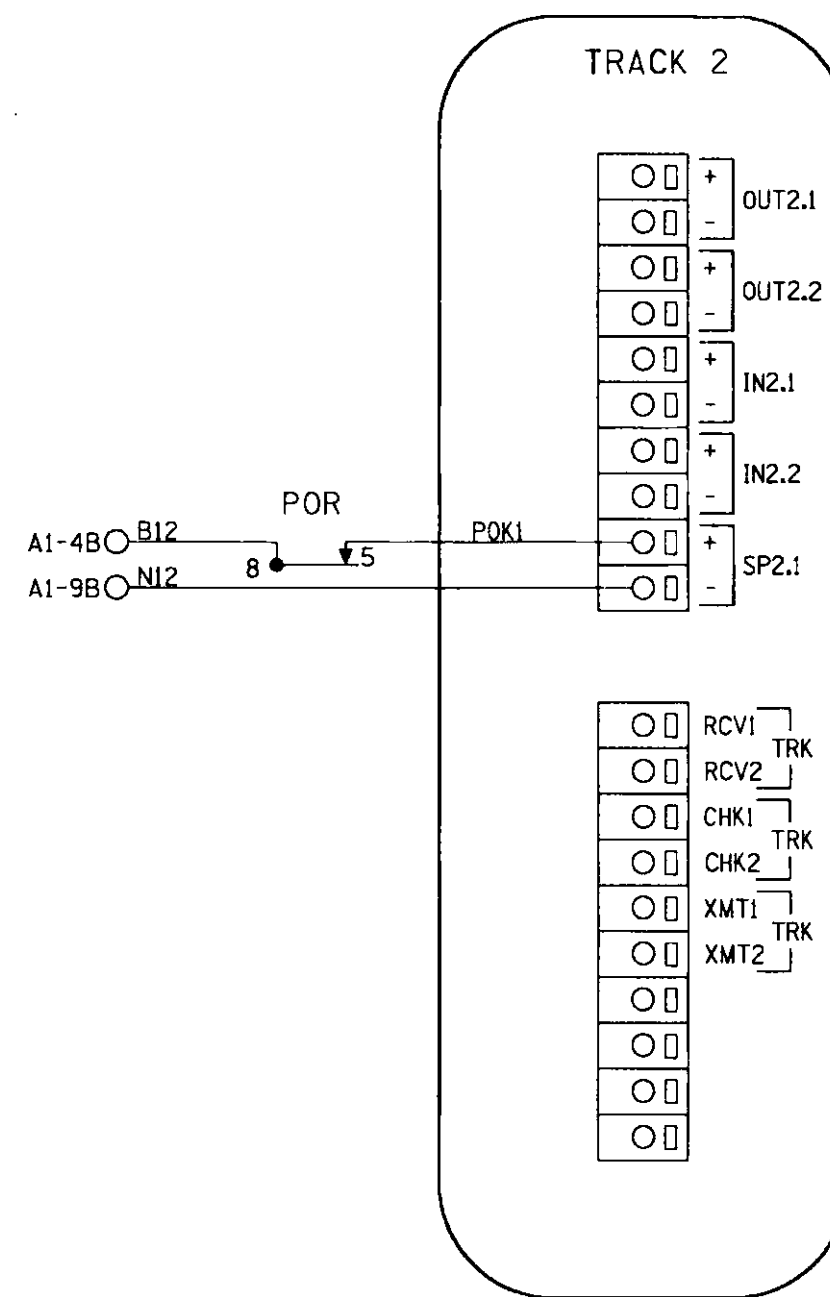
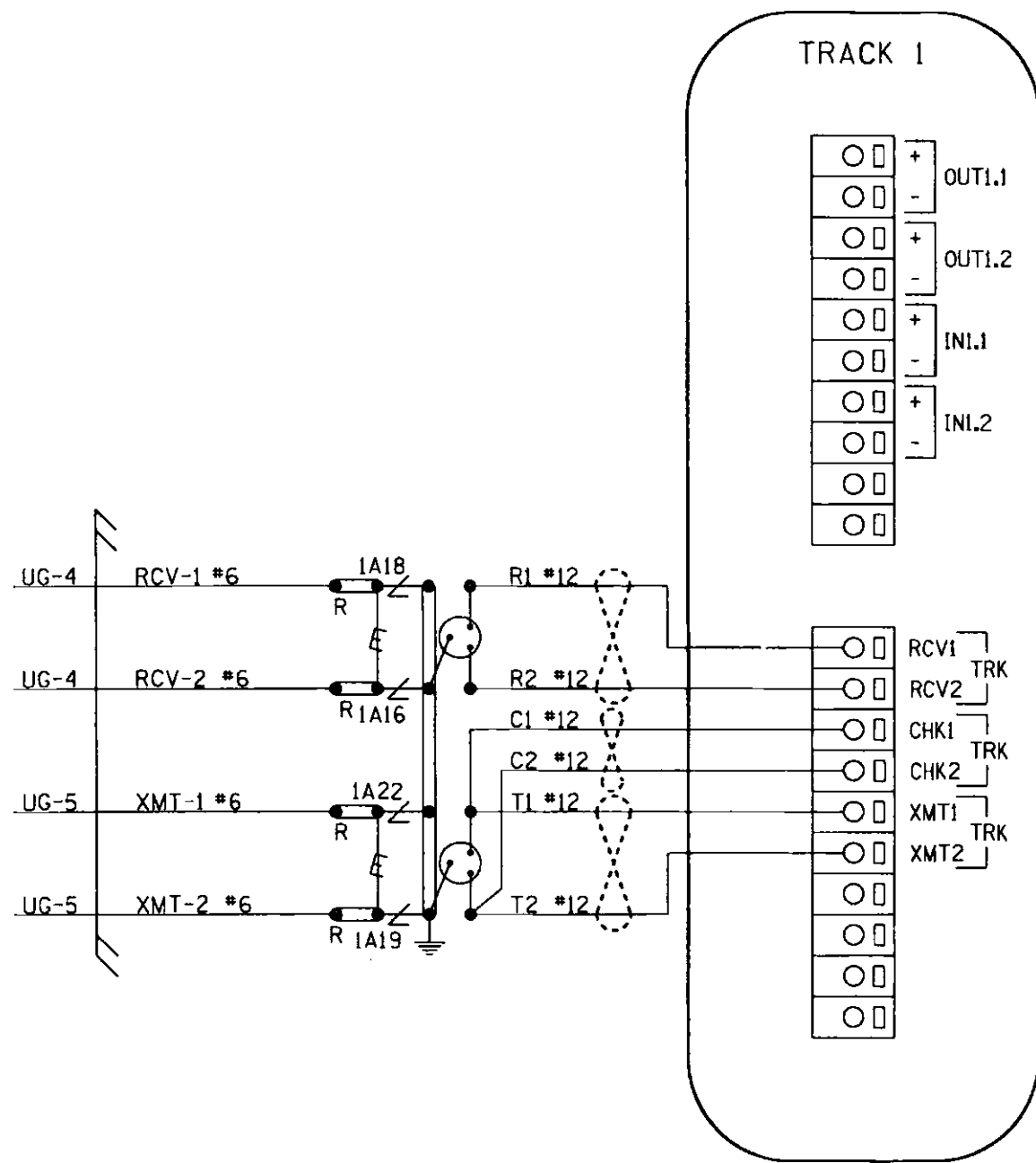
RECEIVED
 2016 AUG 10 PM 2:43
 PA P.U.C.
 SECRETARY'S BUREAU

4000 GCP PROGRAMMING SETUP

DESIGNED BY:	WJK 04-05-16	 NORFOLK SOUTHERN	M.P.: LG-5.24
DRAWN BY:	XRL 04-05-16		
CHECKED BY:	PEH 04-08-16	CAMP HILL, PA CFLGS AT SLATE HILL RD	
IN SERVICE:	- -	LURGAN BRANCH	FILE No. R-
		CADD or DWG. No. 03330052.08	SHEET No. 8 of 23

REVISION INITIALS																				
-------------------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

PROPERTY
 PENNSYLVANIA R.R.



RECEIVED
 2016 AUG 10 PM 2:43
 PA P.H.S.
 SECRETARY'S BUREAU

NOTES:
 ALL WIRING TO BE #16AWG
 UNLESS NOTED OTHERWISE.

= TWIST

CONNECTORS FOR TRACK MODULES

DESIGNED BY: WJK 04-05-16	NORFOLK SOUTHERN	
DRAWN BY: XRL 04-05-16	OFFICE OF ASS'T. VICE PRESIDENT COMM. & SIGNAL, ATLANTA, GA.	M.P.: LG-5.24
CHECKED BY: PEH 04-08-16	CAMP HILL, PA CFLGS AT SLATE HILL RD	
IN SERVICE: - -	LURGAN BRANCH	FILE No. R-
	CADD or DWG. No. 03330052.09	SHEET No. 9 of 23

REVISION INITIALS										
-------------------	--	--	--	--	--	--	--	--	--	--

PROPERTY
 PENNSYLVANIA R.R.

SITE SET UP PROCEDURE	
FUNCTION	LED DISPLAY
DATE/TIME	
AUTOMATIC DST ADJUSTMENT	YES
TIME ZONE	EST
SITE NAME	SLATE HILL RD.
MILEPOST	LG-5.24
DOT *	592204U
TESTER TYPE	CROSSING
DATE FORMAT	MM-DD-YYYY
TEMP FORMAT	FAHRENHEIT
INDICATE HOLD (SEC)	0
INDICATE REFRESH (SEC)	60
SITE ATCS	7.550.582.005.03.01
SITE TYPE	NO COMMUNICATION
** OFFICE ATCS ADDRESS	2.550.00.0000
** PRIMARY HOP ADDR	7.RRR.LLL.GGG.XX.XX
** BACKUP HOP ADDR 1	7.RRR.LLL.GGG.XX.XX
** BACKUP HOP ADDR 2	7.RRR.LLL.GGG.XX.XX
** POLL ID	1
** MODE	GEN/ATCS
** WAMS XID	DISABLED
** OFFICE COMM DEVICE	MCM (ECHELON)
** RADIO ATCS ADDR	7.RRR.LLL.GGG.01.01
** PHONE *	(OFFICE NUMBER)
** INIT STRING	
** FIELD COMM DEVICE	NONE
*** USER PORT BAUD	57600
*** USER PORT DATA BITS	8
*** USER PORT PARITY	NONE
*** USER PORT STOP BITS	1
*** USER PORT FLOW CONTROL	NONE
*** AUX PORT BAUD	9600
*** AUX PORT DATA BITS	8
*** AUX PORT PARITY	NONE
*** AUX PORT STOP BITS	1
*** AUX PORT FLOW CONTROL	NONE

CONTROL SYSTEM CONFIGURATION MENU QUESTIONS	
THE QUESTION	SELECT FROM MENU OPTION
RESET NAMES AND MODULES?	YES
RAILROAD NUMBER	550
CROSSING CONFIGURATION	NORMAL
AND 1 USED AS XR?	YES
AND 2 USED AS XR?	NO
AND 3 USED AS XR?	NO
AND 4 USED AS XR?	NO
AND 5 USED AS XR?	NO
AND 6 USED AS XR?	NO
AND 7 USED AS XR?	NO
AND 8 USED AS XR?	NO
* XR CONTROLLED BY FOREIGN RR	
ENTRANCE GATES	2
85% VOLTAGE RELAY OUT	YES
* GATES CONTROLLED BY FOREIGN RR	
BATTERY BANKS	
BATTERY MON USED	NO
PREEMPTION	NO
INTERNAL CROSSING CONTROLLERS	2
EXTERNAL CROSSING CONTROLLERS	0
VHF COMMUNICATOR	YES
DTMF ACTIVATION	YES
***** ACTIVATION CODE	204
ACTIVATION TIMEOUT (SECONDS)	60
ILOD MODULES	0
***** ANY LED BULBS USED	
VHF VOICE CHANNEL	2
VHF DATA CHANNEL	2
USE CELL MODEM NON-CRITICAL FEATURE	NO


TO CONFIGURE SEARIII PRESS SITE SETUP KEY.
USE ARROW KEYS TO MAKE SELECTION.
PRESS ENTER AFTER SELECTION HAS BEEN MADE.

PROGRAM MENU QUESTIONS	PROGRAM
EDIT DIGITAL INPUTS	NO
EDIT BATTERIES	NO
EDIT RELAYS	NO
EDIT INDICATOR LEDS	NO
EDIT TEST LEDS	NO
EDIT ILOD SENSORS	NO
EDIT VHF SETTINGS	NO
GCP4K ATCS SUBNODE	16

NOTES:

- * = DISPLAYED IF CROSSING CONFIGURATION IS SPLIT GATE.
- ** = IF SITE TYPE = NO COMMUNICATION, THEN THESE OPTIONS ARE NOT DISPLAYED.
- *** = THESE SETTINGS SHOULD BE LEFT AT THE DEFAULT SETTING.
- **** = USE LAST 3 NUMBERS FROM DOT NUMBER.
- ***** = IF ILOD MODULE >0.

SEAR III PROGRAMMING SETUP

DESIGNED BY: WJK 04-05-16		OFFICE OF ASS'T. VICE PRESIDENT COMM. & SIGNAL, ATLANTA, GA. M.P.: LG-5.24
DRAWN BY: XRL 04-05-16		
CHECKED BY: PEH 04-08-16	CAMP HILL, PA CFLGS AT SLATE HILL RD	
IN SERVICE: - -	LURGAN BRANCH	FILE No. R-
	CADD or DWG. No. 03330052.11	SHEET No. 11 of 23

REVISION
INITIALS

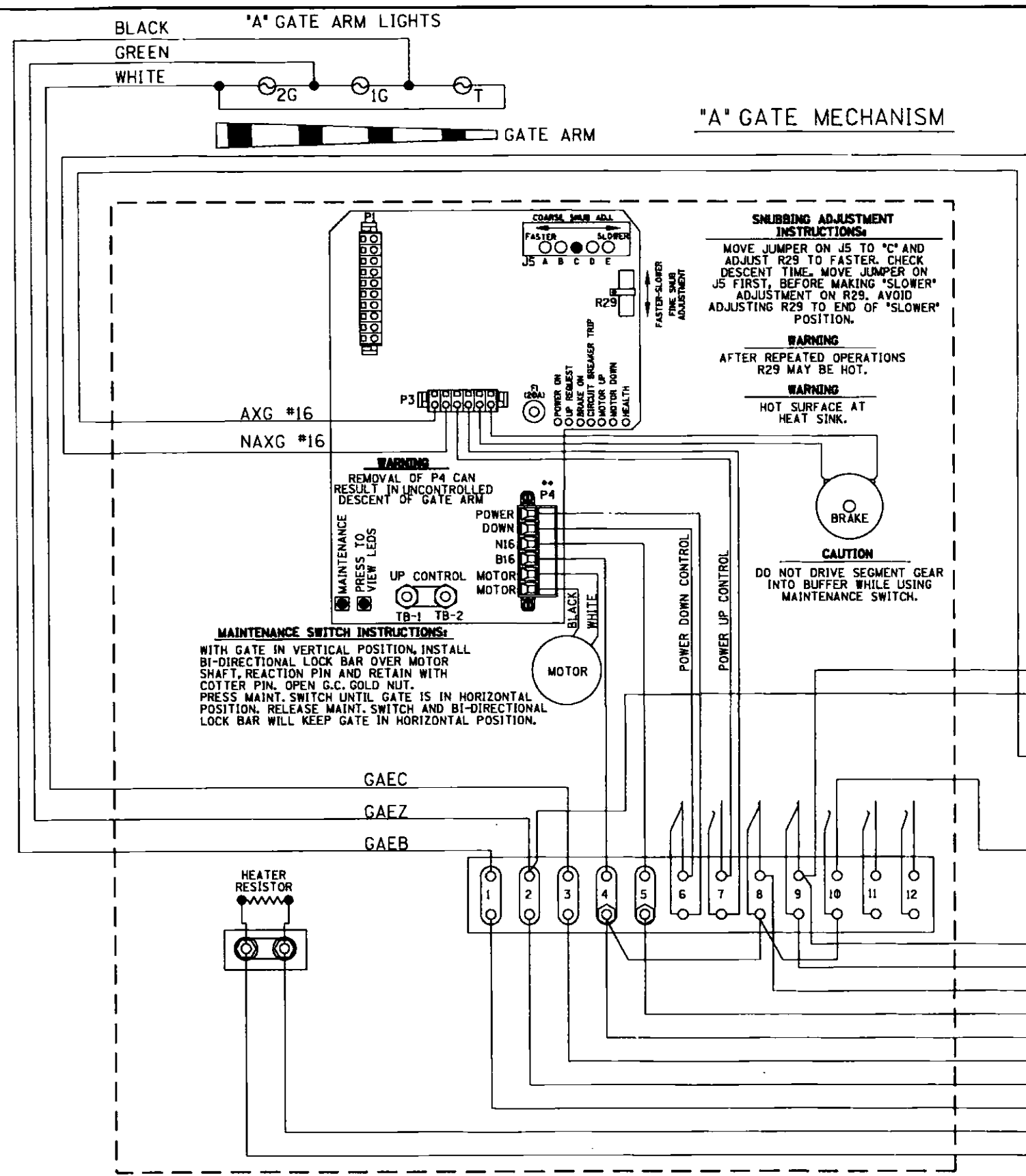
PROPERTY
PENNSYLVANIA R.R.

RECEIVED
 2016 AUG 10 PM 2:43
 PA P.U.C.
 SECRETARY'S BUREAU

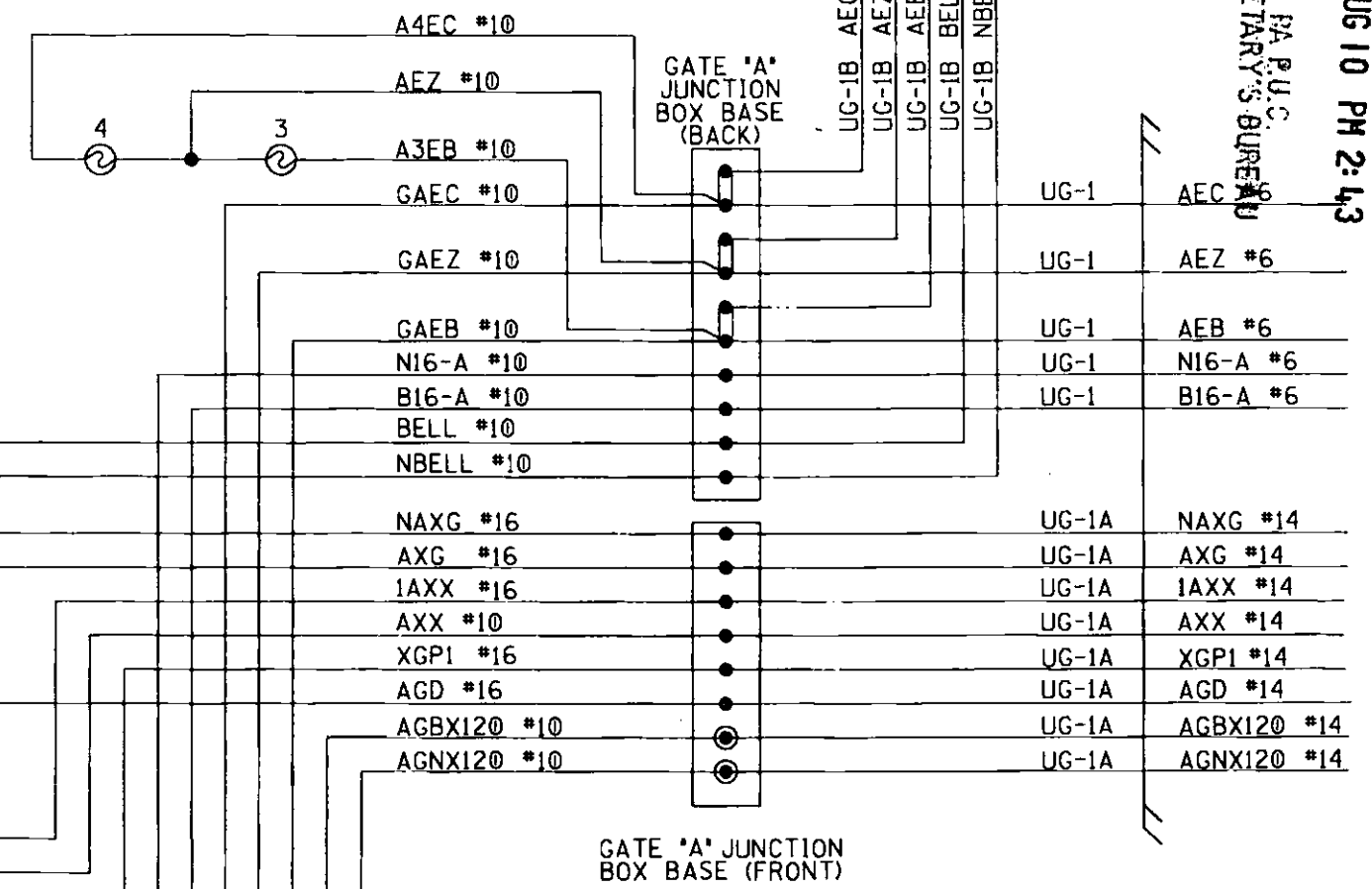
SAFETRAN MODEL 'S60' GATE

CONTACT SPACE	CONTACT CLOSED AT	FUNCTION OF CONTACT
6	70°-90°	POWER DOWN CONTROL
7	0°-89°	POWER UP CONTROL
8	83°-90°	FLASHING LGT. CONTROL
9	5°-90°	BELL CONTROL
10	0°-5°	GATE DOWN INDICATION
11		SPARE
12		SPARE

'A' GATE MECHANISM



'A' GATE MAST FLASHING LIGHTS



SIGNAL 'A' S60 GATE & FLASHER CIRCUITS

DESIGNED BY: WJK 04-05-16	NS NORFOLK SOUTHERN
DRAWN BY: XRL 04-05-16	
CHECKED BY: PEH 04-08-16	OFFICE OF ASS'T. VICE PRESIDENT COMM. & SIGNAL, ATLANTA, GA. M.P.: LG-5.24
IN SERVICE:	CAMP HILL, PA CFLGS AT SLATE HILL RD
	LURGAN BRANCH
	FILE No. R-
	CADD or DWG. No. 03330052.15
	SHEET No. 15 of 23

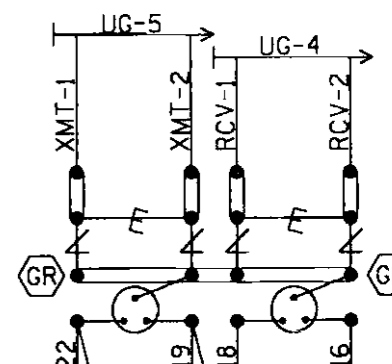
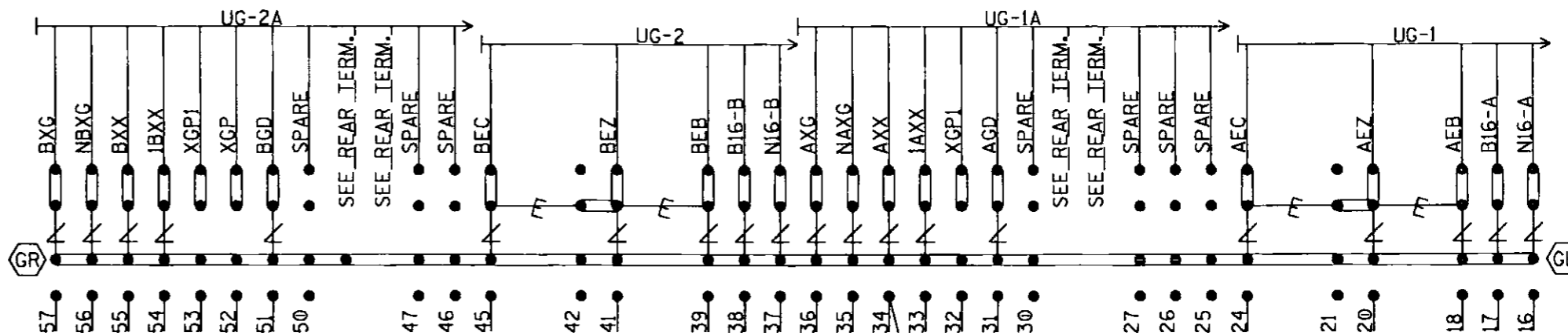
RECEIVED
2016 AUG 10 PM 2:43
PA P.U.C.
SECRETARY'S BUREAU

RECEIVED

2016 AUG 10 PM 2:43

PA P.U.C.
SECRETARY'S BUREAU

LEFT TWO ROWS TERMINAL BOARD 1
"1A"
"1B"



NOTE: INSTALL TEST LINKS ON ALL TRACK WIRES AND ON ALL LOW VOLTAGE UNDERGROUND CABLE TERMINATIONS.

SEE FARADAY SHIELD DETAILS - 1A & 1B FOR HOW THIS PORTION OF THE FARADAY SHIELD IS PREDRILLED. ONLY INSTALL AND USE THE TERMINALS NEEDED.

⚡ = Heavy Duty Equalizer (022700-1X)

△ = Clearview Lightning Arrester (022585-1X)

⊙ = LPC-10560-51

⊙ GR = TERMINALS GROUNDED TO SHIELD. 4 POST BLOCKS USE EITHER - GR - SERMMI PART NO. 61278 GL - SERMMI PART NO. 61278-1.

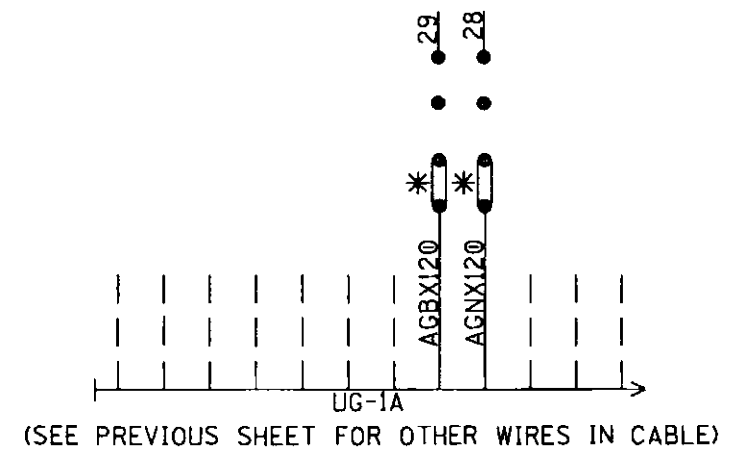
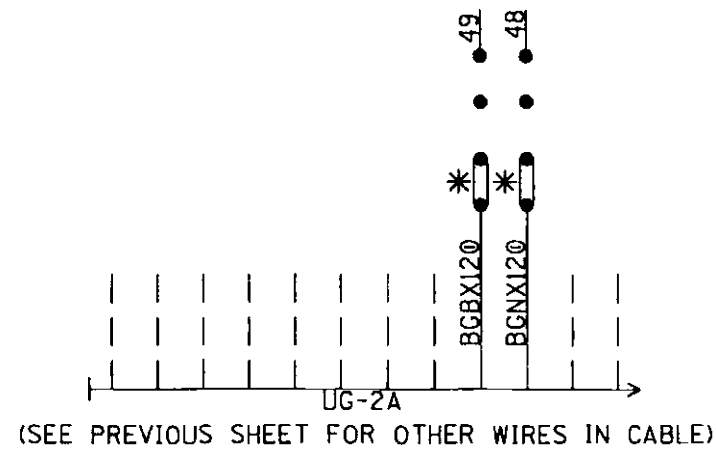
BACKBOARD 1A & 1B

DESIGNED BY: WJK 04-05-16	NS NORFOLK SOUTHERN	
DRAWN BY: XRL 04-05-16	OFFICE OF ASS'T. VICE PRESIDENT COMM. & SIGNAL, ATLANTA, GA.	M.P.: LG-5.24
CHECKED BY: PEH 04-08-16	CAMP HILL, PA CFLGS AT SLATE HILL RD	
IN SERVICE: - -	LURGAN BRANCH	FILE No. R-
	CADD or DWG. No. 03330052.17	SHEET No. 17 of 23

REVISION INITIALS

PROPERTY
PENNSYLVANIA R.R.

REAR VIEW OF LEFT TWO ROWS TERMINAL BOARD I
 "1A" "1B"



NOTE: ALL 120VAC AND ABOVE WILL BE WIRED TO THE REAR OF FARADAY BACKBOARD. INSULATED NUTS MUST BE USED ON ALL TERMINALS.

* = CLOSED DURING WINTER MONTHS

REAR BACKBOARD 1A & 1B

DESIGNED BY:	NS NORFOLK SOUTHERN	
WJK 04-05-16	OFFICE OF ASST. VICE PRESIDENT COMM. & SIGNAL, ATLANTA, GA.	M.P.: LG-5.24
DRAWN BY:	CAMP HILL, PA	
XRL 04-05-16	CFLGS AT SLATE HILL RD	
CHECKED BY:	LURGAN BRANCH	
PEH 04-08-16	FILE No. R-	
IN SERVICE:	CADD or DWG. No. 03330052.18	SHEET No. 18 of 23

REVISION INITIALS																			
-------------------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

PROPERTY PENNSYLVANIA R.R.

RECEIVED
 2016 AUG 10 PM 2:43
 PA P.U.C.
 SECRETARY'S BUREAU

NOTE: IF THE FARADAY SHIELD WOULD EVER NEED TO BE DRILLED IN THE FIELD, PROPER PRECAUTIONS MUST BE TAKEN TO INSURE METAL SHAVINGS DO NOT GET INTO EXISTING TERMINALS/WIRES.

AREA BELOW IS SCALED WITH AS=.75

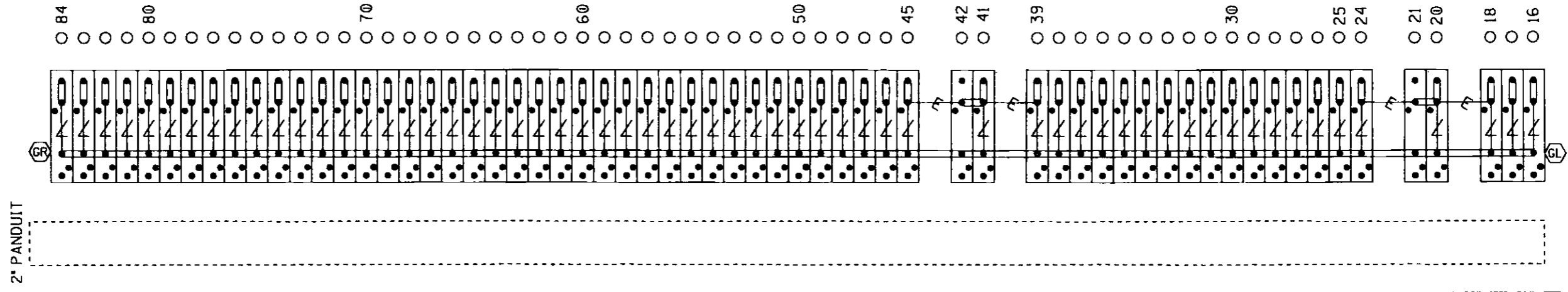
RECEIVED

2016 AUG 10 PM 2:43

PA P.U.C.
SECRETARY'S BUREAU

TERMINAL BOARD 1
RIGHT HALF

"1C"



E = Heavy Duty Equalizer
(022700-1X)

Z = Clearview
Lightning Arrester
(022585-1X)

⊙ = LPC-10560-51

⊙GR = TERMINALS GROUNDED TO SHIELD.
⊙GL = 4 POST BLOCKS USE EITHER -
GR - SERMMI PART NO. 61278
GL - SERMMI PART NO. 61278-1.

⊙ = INDICATES PLACEMENT
OF PANDUIT

THIS SHEET IS FOR REFERENCE ONLY,
TO REFLECT HOW THE FARADAY SHIELD
IS PREDRILLED. ONLY INSTALL AND USE
THE TERMINALS NEEDED.

FARADAY SHIELD 1C

DESIGNED BY:	NS NORFOLK SOUTHERN		
WJK 04-05-16	OFFICE OF ASS'T. VICE PRESIDENT COMM. & SIGNAL, ATLANTA, GA.	M.P.:	LG-5.24
DRAWN BY:	CAMP HILL, PA CFLGS AT SLATE HILL RD		
XRL 04-05-16	LURGAN BRANCH	FILE No. R-	
CHECKED BY:		SHEET No.	20 of 23
PEH 04-08-16			
IN SERVICE:			
- -	CADD or DWG. No. 03330052.20		

REVISION
INITIALS

PROPERTY
PENNSYLVANIA R.R.


SH. NO.	CONTENTS
NX1	INDEX SHEET
1	LAYOUT
2	PROFILE
3	CABLE PLAN
4	LOAD CENTER
5	B12 & B16 CHARGERS & BATTERIES
6	4000 GCP 2-TK CHASSIS & MODULE LAYOUT
7	4000 GCP PROGRAMMING SETUP
8	4000 GCP PROGRAMMING SETUP
9	CONNECTORS FOR TRACK MODULES
10	CPU MODULE, SEAR III & VHF HOOK-UPS
11	SEAR III PROGRAMMING SETUP
12	SSCC#1 MODULE HOOK-UP
13	SSCC#2 MODULE HOOK-UP
14	CANTILEVER FLASHER LIGHTS
15	SIGNAL "A" S60 GATE & FLASHER CIRCUITS
16	SIGNAL "B" S60 GATE & FLASHER CIRCUITS
17	BACKBOARD 1A & 1B
18	REAR BACKBOARD 1A & 1B
19	FARADAY SHIELD 1A & 1B
20	FARADAY SHIELD 1C
21	HOUSE SIDE C LAYOUT & RACK PLACEMENT
22	HOUSE SIDE A LAYOUT
23	HOUSE SIDE B LAYOUT & TOP VIEW

PA P.U.C.
 SECRETARY'S BUREAU

2016 AUG 10 PM 2:44

RECEIVED

INDEX SHEET

DESIGNED BY:			
WJK 04-05-16	OFFICE OF ASS'T. VICE PRESIDENT	M.P.:	LG-5.24
DRAWN BY:	COMM. & SIGNAL, ATLANTA, GA.		
XRL 04-05-16	CAMP HILL, PA		
CHECKED BY:	CFLGS AT SLATE HILL RD		
PEH 04-08-16	LURGAN BRANCH	FILE No.	R-
IN SERVICE:	CADD or DWG. No.	03330052.NX1	SHEET No. 1 of 1

REVISION INITIALS

PROPERTY
PENNSYLVANIA R.R.